

Miniaturized System-in-Package Motor Controller for Spacecraft and Orbital Instruments, Phase I

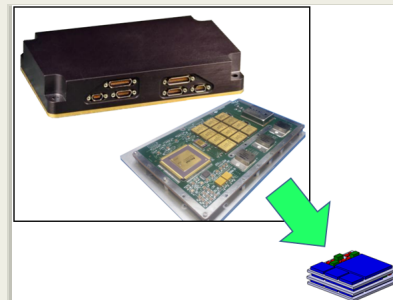
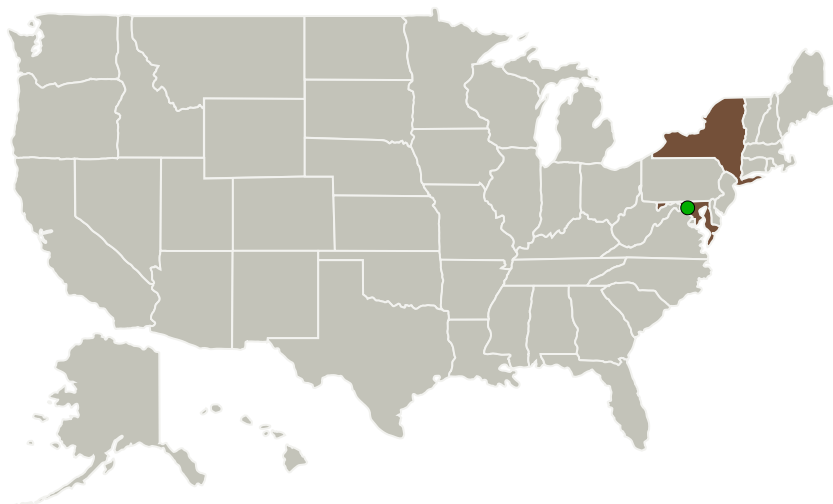
Completed Technology Project (2015 - 2015)



Project Introduction

Honeybee Robotics proposes to miniaturize a heritage spaceflight motor controller using System-in-Package technology. This motor controller will be a universal solution for the control of BLDC, PMSM, and microstepping motors in robotic space systems and orbital instruments, with a form factor at least 75% smaller than comparable units.


Primary U.S. Work Locations and Key Partners



Miniaturized System-in-Package Motor Controller for Spacecraft and Orbital Instruments, Phase I

Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	2
Images	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	2
Technology Areas	3
Target Destinations	3

Organizations Performing Work	Role	Type	Location
Honeybee Robotics, Ltd.	Lead Organization	Industry	Pasadena, California
 Goddard Space Flight Center(GSFC)	Supporting Organization	NASA Center	Greenbelt, Maryland

Primary U.S. Work Locations

Maryland	New York
----------	----------

Miniaturized System-in-Package Motor Controller for Spacecraft and Orbital Instruments, Phase I

Completed Technology Project (2015 - 2015)



Project Transitions



June 2015: Project Start



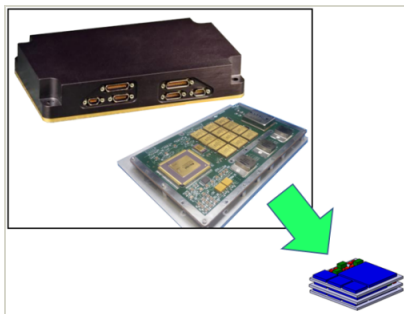
December 2015: Closed out

Closeout Summary: Miniaturized System-in-Package Motor Controller for Spacecraft and Orbital Instruments, Phase I Project Image

Closeout Documentation:

- Final Summary Chart Image(<https://techport.nasa.gov/file/139239>)

Images



Briefing Chart Image

Miniaturized System-in-Package Motor Controller for Spacecraft and Orbital Instruments, Phase I
(<https://techport.nasa.gov/image/126673>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Honeybee Robotics, Ltd.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

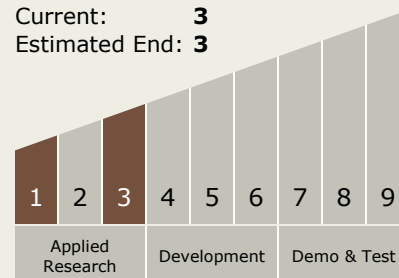
Carlos Torrez

Principal Investigator:

Andrew Maurer

Technology Maturity (TRL)

Start: **1**
Current: **3**
Estimated End: **3**



Miniaturized System-in-Package Motor Controller for Spacecraft and Orbital Instruments, Phase I

Completed Technology Project (2015 - 2015)



Technology Areas

Primary:

- TX08 Sensors and Instruments
 - └ TX08.1 Remote Sensing Instruments/Sensors
 - └ TX08.1.3 Optical Components

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System